ABSTRACT OF THE DISCLOSURE

A back substrate has a plurality of electron emission elements. A display substrate comprises an optically transparent substrate disposed opposite to the back substrate; an accelerating electrode formed on the inner face of the optically transparent substrate for accelerating electron beams emitted from the electron emission elements; and luminescent materials excited by the electron beams to emit light toward the outer face of the optically transparent substrate. A frame member supports the back substrate and display substrate on their peripheries. A vacuum chamber is defined by the back substrate, display substrate, and frame member. A conductor electrically connected to the accelerating electrode is drawn out to the outside of the vacuum chamber. A high voltage connector for supplying an accelerating voltage to the conductor is removably connected to the conductor.